



1FW

PATENT
Customer No. 22,852
Attorney Docket No. 7883.0080-12

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Mark KNUDSON et al.

Application No.: 10/682,067

Filed: October 9, 2003

For: METHOD AND APPARATUS FOR
PERFORMING CORONARY
ARTERY BYPASS SURGERY

)
)
) Group Art Unit: 3738
)
) Examiner: ISABELLA, DAVID J
)
)
)
) Confirmation No.: 9479
)
)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicants bring to the attention of the Examiner the documents on the attached Form PTO/SB/08. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the foreign patent documents and non-patent literature listed on pages 7 and 10-13 of the Form PTO/SB/08 are attached. The foreign patent documents and non-patent literature documents listed on pages 2-6 are of record in prior Application No. 09/326,819, filed June 7, 1999, upon which Applicants rely for the benefits provided in 35 U.S.C. § 120, and accordingly copies are not enclosed. Copies of the U.S. patent publications are not enclosed.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form PTO/SB/08.

Regarding non-English language documents SU 1754128 A1 and RU 2026640 C1, English language abstracts were provided in prior Application No. 09/326,819, filed June 7, 1999.

Regarding non-English language documents WO 96/32972 A1 and WO 96/35469 A1, Applicants provide herewith English language abstracts.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claims in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please
charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: January 26, 2006

By: 

Michael W. Kim
Reg. No. 51,880

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

13

Application Number

10/682,067

Filing Date

October 9, 2003

First Named Inventor

Mark KNUDSON

Art Unit

3738

Examiner Name

ISABELLA, DAVID J

Attorney Docket Number

07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS

Examiner Initials	Cite No. ¹	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		15,192	06-1856	Peale	
		2,127,983	08-1938	Bowen	
		3,042,021	07-1962	Read	
		3,995,617	12-1976	Watkins et al.	
		4,086,665	05-1978	Poirier	
		4,441,215	04-1984	Kaster	
		4,546,499	10-1985	Possis et al.	
		4,562,597	01-1986	Possis et al.	
		4,581,017	04-1986	Sahota	
		4,601,718	07-1986	Possis et al.	
		4,712,551	12-1987	Rayhanabad.	
		4,769,031	09-1988	McGough et al.	
		4,788,975	12-1988	Shturman et al.	
		4,861,330	08-1989	Voss	
		4,862,886	09-1989	Clarke et al.	
		4,902,289	02-1990	Yannas	
		4,953,553	09-1990	Tremulis	
		4,955,856	09-1990	Phillips	
		4,985,014	01-1991	Orejola	
		4,995,857	02-1991	Arnold	
		5,054,484	10-1991	Hebeler, Jr.	
		5,071,406	12-1991	Jang	
		5,143,093	09-1992	Sahota	
		5,190,058	03-1993	Jones et al.	
		5,209,731	05-1993	Sterman et al.	
		5,236,446	08-1993	Dumon	
		5,254,097	10-1993	Schock et al.	
		5,256,150	10-1993	Quiachon et al.	
		5,275,622	01-1994	Lazarus et al.	
		5,287,861	02-1994	Wilk	
		5,370,685	12-1994	Stevens	
		5,383,925	01-1995	Schmitt	
		5,395,349	03-1995	Quiachon et al.	
		5,409,019	04-1995	Wilk	

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	2	of	13	Attorney Docket Number	07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
		5,425,705	06-1995	Evard et al.	
		5,429,144	07-1995	Wilk	
		5,443,497	08-1995	Venbrux	
		5,452,733	09-1995	Sterman et al.	
		5,458,574	10-1995	Machold et al.	
		5,484,418	01-1996	Quiachon et al.	
		5,489,295	02-1996	Piplani et al.	
		5,500,014	03-1996	Ouijano	
		5,501,698	03-1996	Roth et al.	
		5,505,725	04-1996	Samson et al.	
		5,609,626	03-1997	Quijano et al.	
		5,655,548	08-1997	Nelson et al.	
		5,662,124	09-1997	Wilk	
		5,676,696	10-1997	Marcade	
		5,755,682	05-1998	Knudson et al.	
		5,830,222	11-1998	Makower	
		5,944,019	08-1999	Knudson et al.	
		6,350,248	02-2002	Knudson et al.	
		6,361,519	03-2002	Knudson et al.	

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		EP 0 515 867 A2	12-02-1992	UNIV COLUMBIA (US)		
		SU 1754128 A1	08-15-1992	KH NII OBSCHEI NEOTLOZH KHIRU		Abstract
		RU 2026640 C1	01-20-1995	KONONOV ADOLIJ YAKOVLEVICH		Abstract
		WO 93/00868 A1	01-21-1993	OWEN EARL RONALD		
		WO 96/00033 A1	01-04-1996	HEARTPORT INC		
		WO 96/04854 A1	02-22-1996	HEARTPORT INC		
		WO 96/05773 A1	02-29-1996	HEARTPORT INC		
		WO 96/39965 A1	12-19-1996	Cardiogenesis		

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	3	of	13	Attorney Docket Number	07883.0080-12

FOREIGN PATENT DOCUMENTS						
				Corporation		
		WO 97/13463 A1	04-17-1997	Transvascular, Inc.		
		WO 97/13471 A1	04-17-1997	Transvascular, Inc.		
		WO 97/27897 A1	08-07-1997	Transvascular, Inc.		
		WO 98/08456 A1	03-05-1998	Transvascular, Inc.		
		WO 98/46115 A2	10-22-1998	Transvascular, Inc.		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		Translation ⁶
		"Expandable Intraheptic Protacaval Shunt Stents" Julio Palmaz et al., AJR:145, pp. 821-825, Oct. 1985.		
		"Expandable Intraheptic Protacaval Shunt" Julio Palmaz et al., AJF:147, pp. 1251-1254, Dec. 1986.		
		"Percutaneous Transjugular Portosystemic Stent", Gerald Zemel et al., JAMA, vol. 266, No. 3, Jul. 17, 1991, pp. 390-393.		
		"Transjugular Intraheptic Portocaval Stent" Goetz M. Richter et al., Hepatic and Billard Radiology, pp. 1027-1030, vol. 174, Mar. 1990.		
		Alfred Goldman, M.D., et al., Experimental Methods for Producing a Collateral Circulation to the Heart Directly from the Left Ventricle, 31 J. Thoracic Surg. 364-374 (Mar. 1956).		
		Andrews et al., Assessment of Feasibility for Endovascular Prosthetic Tube Correction of Aortic Aneurysm, 82 Brit. J. of Surgery 917-919 (1995).		
		Banning G. Lary, MD, et al., Myocardial Revascularization Experiments Using the Epicardium Archives of Surgery, vol. 98, No. 1, pp. 69-72 (Jan. 1969).		
		Black, Martin M. et al., Design and Flow Characteristics, p. 4, Replacement Cardiac Valves, Bodner, Endre et al., Editors, Pergamon Press (1991) (title page, p. v and p. 4 reproduced).		
		Bojan Cercek, M.D. et al., Growth Factors in Pathogenesis of Coronary Arterial Restenosis, 68 Am. J. Cardiology 24C-33C (Nov. 4, 1991).		
		Bruce F. Waller & Cass A. Pinkerton, The Pathology of Interventional Coronary Artery Techniques and Devices, in 1 Topol's Textbook of Interventional Cardiology 449-476 (Eric J. Topol ed., 2nd ed. 1994).		
		Carmelo A. Milano, M.D. et al., Mediastinitis After Coronary Artery Bypass Graft Surgery, 92 Circulation 2245-2251 (Oct. 15, 1995).		
		Combined Search and Examination Report Under Sections 17 & 18(3) dated Nov. 10, 1997 on UK Patent Application No. GB 9717116.9.		
		Combined Search and Examination Report under Sections 17 and 18(3) on UK patent application No. GB 9717116.9, 2 pgs (1997).		
		Daniel S. Schwartz, M.D. et al., Minimally Invasive Cardiopulmonary Bypass with Cardioplegic Arrest: A Closed Chest Technique with Equivalent Myocardial Protection, 111 J. Thoracic & Cardiovascular Surgery 556-566 (Mar. 1996).		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	4	of	13	Attorney Docket Number	07883.0080-12

NON PATENT LITERATURE DOCUMENTS			
		Document No. Ser. No. 60/005,164 filing date Oct. 1995.	
		Document No. Ser. No. 60/010,614 filing date Feb. 1996.	
		Enio Buffolo, M.D. et al., Coronary Artery Bypass Grafting Without Cardiopulmonary Bypass, 61 Annals of Thoracic Surgery 63-66 (1996).	
		Frank M. Galio, Jr., M.D., et al., Right Coronary Artery to Left Ventricle Fistula, 82 American Heart Journal 93-97 (Jul. 1971).	
		Fumihiko Kajiya et al., Endocardial Coronary Microcirculation of the Beating Heart, in Interactive Phenomena in the Cardiac System, 173-180 (S. Sideman and R. Beyar eds. 1993).	
		Fumihiko Kajiya et al., Velocity Profiles and Phasic Flow Patterns in the Non-Stenotic Human Left Anterior Descending Coronary Artery During Cardiac Surgery, 27 Cardiovascular Res. 845-850 (1993).	
		Fumihiko Kajiya M.D., Ph.D. et al., Mechanical Control of Coronary Artery Inflow and Vein Outflow, 53 Japanese Circulation J. 431-439 (May 1989).	
		Fumihiko Kajiya, et al., Endocardial Coronary Microcirculation of the Beating Heart, in Interactive Phenomena In The Cardiac System, 173-180 (S. Sideman and R. Beyar eds. 1993).	
		G. Hausdorf et al., Radiofrequency-Assisted "Reconstruction" of the Right Ventricular Outflow Tract in Muscular Pulmonary Atresia with Ventricular Septal Defect, 69 Br Heart J 343-346 (1993).	
		G. Nollert et al., Use of the Internal Mammary Artery as a Graft in Emergency Coronary Artery Bypass Grafting after Failed PTCA, 43 Thoracic Cardiovascular Surgeon 142-147 (1995).	
		George Silvay, M.D., Ph.D. et al., Cardiopulmonary Bypass for Adult Patients: A Survey of Equipment and Techniques, 9 J. of Cardiothoracic & Vascular Anesthesia 420-424 (Aug. 1995).	
		Gerald D. Buckberg, MD, Update on Current Techniques on Myocardial Protection, 60 Annals of Thoracic Surgery, 805-814 (1995).	
		Hausdorf et al., Radiofrequency-Assisted "Reconstruction" of the Right Ventricular Outflow Tract in Muscular Pulmonary Alresia with Ventricular Septal Defect, 69 Br Heart J. 343-346 (1993).	
		Ian Munro, et al., The Possibility of Myocardial Revascularization by Creation of a Left Ventriculocoronary Artery Fistula, 58 J. Thoracic & Cardiovascular Surgery 25-32 (Jul. 1969).	
		International Search Report dated Dec. 11, 1997 on PCT/US9713980.	
		Jerome Segal, M.D. et al., Alterations of Phasic Coronary Artery Flow Velocity in Humans During Percutaneous Coronary Angioplasty 20 J. Am. College of Cardiology 276-286 (Aug. 1992).	
		John H. Stevens, M.D. et al., Port-Access Coronary Artery Bypass Grafting: A Proposed Surgical Method, 111 J. Thoracic & Cardiovascular Surgery (Mar. 1996).	
		Kit V. Arom, M.D., Ph.D. et al., Patient Characteristics, Safety, and Benefits of Same-Day Admission for Coronary Artery Bypass Grafting, 61 Annals Of Thoracic Surgery 1136-1140 (1996).	
		L. Levinsky, et al., The Revival of the Horseshoe Graft, The Thoracic and Cardiovascular Surgeon, vol. 27, No. 5 (Oct. 1979).	
		Ladislav Kuzela et al., Experimental Evaluation of Direct Transventricular Revascularization Journal of Thoracic and Cardiovascular Surgery, vol. 57, No. 6, pp.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	5	of	13	Attorney Docket Number	07883.0080-12

NON PATENT LITERATURE DOCUMENTS			
		770-773 (Jun. 1969).	
		Larry R. Kaiser et al., Video-Assisted Thoracic Surgery: The Current State of the Art, 165 Am. J. Roentgenology 1111-1117 (Nov. 1995).	
		Louagie et al., Operative Risk Assessment in Coronary Artery Bypass Surgery, 1990-1993: Evaluation of Perioperative Variables, 43 Thoracic Cardiovascular Surgeon 134-141 (1995).	
		Ludwig K. Von Segesser, Arterial Grafting for Myocardial Revascularization: Indications, Surgical Techniques and Results 4-5, 38-39, 48-80 (1990).	
		Mahmood Mirhoseini, M.D., et al., New Concepts in Revascularization of the Myocardium, 45 Annals of Thoracic Surgery 415-420 (Apr. 1988).	
		Mark Vierra, M.D., Minimally Invasive Surgery, 46 Ann. Rev. Med. 147-158 (1995).	
		Mark W. Connolly & Robert A. Guyton, Cardiopulmonary Bypass and Intraoperative Protection, in Hurst's the Heart 2443-450 (Robert C. Schlant & R. Wayne Alexander eds. 8th ed. 1994).	
		Martin Schneider, M.D. et al., Transcatheter Radiofrequency Perforation and Stent Implantations for Palliation of Pulmonary Arteria in a 3060-g Infant, 34 Catheterization and Cardiovascular Diagnosis 42-45 (1995).	
		Massimo, M.D., et al., Myocardial Revascularization by a New Method of Carrying Blood Directly From the Left Ventricular Cavity into the Coronary Circulation, 34 J. Thoracic Surg. 257-264 (Aug. 1957).	
		Michael D. Dake, M.D. et al., Transluminal Placement of Endovascular Stent--Grafts for the Treatment of Descending Thoracic Aortic Aneurysms, 331 N.E.J.M. 1729-1734 (Dec. 29, 1994).	
		Michael L. Marin, M.D. et al., Initial Experience with Transluminally Placed Endovascular Grafts for the Treatment of Complex Vascular Lesions, 222 Annals of Surgery 449-469 (Oct. 1995).	
		Minoru Hongo, M.D. et al., Effects of Heart Rate on Phasic Coronary Blood Flow Pattern and Flow Reserve in Patients with Normal Coronary Arteries: A Study with an intravascular Doppler Catheter and Spectral Analysis, 127 Am. Heart J. 545-551 (Mar. 1994).	
		Mirhoseini, M.D., et al., Myocardial Revascularization by Laser: A Clinical Report, 3 Lasers in Surgery and Medicine 241-245 (1983).	
		Nishida, Flow Study of Surgical Coronary Artery Fistula as an Alternative to Sequential Bypass, 3 Cardiovascular Surgery 375-380 (Aug. 1995).	
		Nollert et al., Use of the Internal Mammary Artery as a Graft in Emergency Coronary Artery Bypass Grafting after Failed PTCA, 43 Thoracic Cardiovascular Surgeon 142-147 (1995).	
		Peter Whittaker, Ph.D. et al., Transmural Channels Can Protect Ischemic Tissue, 93 Circulation 143-IS2 (Jan. 1, 1996).	
		Prospectus of CardioGenesis Corporation, May 21, 1996, pp. 1-59.	
		Prospectus of CardioThoracic Systems, Apr. 18, 1996, pp. 1-61, F1-F20.	
		Prospectus of CardioThoracic Systems, Inc., May 22, 1996, pp. 1-7.	
		Prospectus of Heartport, Apr. 25, 1996, pp. 1-64, F1-F15.	
		Robert J. Gardner, et al., An Experimental Anatomic Study of Indirect Myocardial Revascularization, Journal of Surgical Research, vol. 11, No. 5, pp. 243-247 (May 1971).	

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	6	of	13	Attorney Docket Number	07883.0080-12

NON PATENT LITERATURE DOCUMENTS			
		Roque Pifarre, M.D., et al. Myocardial Revascularization from the Left Ventricle: A Physiologic Impossibility, 19 Surgical Forum 157-159 (1968).	
		S. M. Andrews et al., Assessment of Feasibility for Endovascular Prosthetic Tube Correction of Aortic Aneurysm, 82 Brit. J. of Surgery 917-919 (1995).	
		Search Report on PCT/US97/13980 claiming priority to Application Nos. 08/689,773; 08/882,397; and 08/906,914, 7 pgs (1997).	
		Stuart W. Jamieson, Aortocoronary Saphenous Vein Bypass Grafting, in Rob & Smith's Operative Surgery: Cardiac Surgery 454-470 (Stuart W. Jamieson & Norman E. Shumway, eds., 4th ed. 1986).	
		Tea E. Acuff, M.D. et al., Minimally Invasive Coronary Artery Bypass Grafting, 61 Annals of Thoracic Surgery 135-137 (1996).	
		Toshiyuki Beppu, ME et al., A Computerized Control System for Cardiopulmonary Bypass, 109 J. Thoracic & Cardiovascular Surgery 428-438 (Mar. 1995).	
		U.S. Patent application Ser. No. 60/005,164, Makower.	
		U.S. Patent application Ser. No. 60/010,614, Makower.	
		Ulrich Sigwart, An Overview of Intravascular Stents: Old and New, in 2 Topol's Textbook Of Interventional Cardiology 803-815 (Eric J. Topol ed., 2nd ed. (1994).	
		Vineberg, M.D., et al., Treatment of Acute Myocardial Infarction by Endocardial Resection, 57 Surgery 832-835 (Jun. 1965).	
		Wanpen Vongpatanasin, M.D. et al., Prosthetic Heart Valves, 335 N.E.J.M. 407-416 (Aug. 8, 1996).	
		Y. Louagie et al., Operative Risk Assessment in Coronary Artery Bypass Surgery, 1990-1993: Evaluation of Perioperative Variables, 43 Thoracic Cardiovascular. Surgeon 134-141 (1995).	

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials	Cite No. ⁷	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ⁸ (if known)			
		5,258,008 A	11-02-1993	Wilk	
		5,330,486 A	07-19-1994	Wilk	
		5,470,320 A	11-28-1995	Tiefenbrun et al.	
		5,758,663 A	06-02-1998	Wilk et al.	
		5,908,028 A	06-01-1999	Wilk	
		6,363,939 B1	04-02-2002	Wilk	
		6,458,323 B1	10-01-2002	Boekstegers	
		6,913,021 B2	07-05-2005	Knudson et al.	
		6,929,011 B2	08-16-2005	Knudson et al.	
		2002/0092535 A1	07-18-2002	Wilk	
		2003/0044315 A1	03-06-2003	Boekstegers	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	7	of	13	Attorney Docket Number	07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ¹²
		Country Code ⁹ Number ¹⁰ Kind Code ¹¹ (if known)				
		WO 96/32972 A1	10-24-1996	Boekstegers, Peter		Abstract

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials	Cite No. ¹³	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ¹⁴ (if known)			
		5,193,546 A	03-16-1993	Shaknovich	
		5,344,426 A	09-06-1994	Lau et al.	
		5,389,096 A	02-14-1995	Aita et al.	
		5,411,552 A	05-02-1995	Andersen et al.	
		5,554,119 A	09-10-1996	Harrison et al.	
		5,593,434 A	01-14-1997	Williams	
		5,618,299 A	04-08-1997	Khosravi et al.	
		5,733,267 A	03-31-1998	Del Toro	
		5,807,384 A	09-15-1998	Mueller	
		5,810,836 A	09-22-1998	Hussein et al.	
		5,824,071 A	10-20-1998	Nelson et al.	
		5,840,081 A	11-14-1998	Andersen et al.	
		5,876,373 A	03-02-1999	Giba et al.	
		5,878,751 A	03-09-1999	Hussein et al.	
		5,885,259 A	03-23-1999	Berg	
		5,925,012 A	07-20-1999	Murphy-Chutorian et al.	
		5,931,848 A	08-03-1999	Saadat	
		5,935,161 A	08-10-1999	Robinson et al.	
		5,938,632 A	08-17-1999	Ellis	
		5,968,064 A	10-19-1999	Selmon et al.	
		5,971,993 A	10-26-1999	Hussein et al.	
		5,997,525 A	12-07-1999	March et al.	
		5,999,678 A	12-07-1999	Murphy-Chutorian et al.	
		6,004,261 A	12-21-1999	Sinofsky et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 8 of 13

Complete if Known

Application Number	10/682,067
Filing Date	October 9, 2003
First Named Inventor	Mark KNUDSON
Art Unit	3738
Examiner Name	ISABELLA, DAVID J
Attorney Docket Number	07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS

	6,004,347 A	12-21-1999	McNamara et al.	
	6,007,543 A	12-28-1999	Ellis et al.	
	6,010,449 A	01-04-2000	Selmon et al.	
	6,026,814 A	02-22-2000	LaFontaine et al.	
	6,035,856 A	03-14-2000	LaFontaine et al.	
	6,036,677 A	03-14-2000	Javier, Jr. et al.	
	6,053,924 A	04-25-2000	Hussein	
	6,067,988 A	05-30-2000	Mueller	
	6,068,638 A	05-30-2000	Makower	
	6,080,163 A	06-27-2000	Hussein et al.	
	6,080,170 A	06-27-2000	Nash et al.	
	6,092,526 A	07-25-2000	LaFontaine et al.	
	6,093,166 A	07-25-2000	Knudson et al.	
	6,093,177 A	07-25-2000	Javier, Jr. et al.	
	6,123,682 A	09-26-2000	Knudson et al.	
	6,126,654 A	10-03-2000	Giba et al.	
	6,132,451 A	10-17-2000	Payne et al.	
	6,155,264 A	12-05-2000	Ressemann et al.	
	6,156,031 A	12-05-2000	Aita et al.	
	6,159,225 A	12-12-2000	Makower	
	6,165,188 A	12-26-2000	Saadat et al.	
	6,168,614 B1	01-02-2001	Andersen et al.	
	6,186,972 B1	02-13-2001	Nelson et al.	
	6,190,353 B1	02-20-2001	Makower et al.	
	6,213,126 B1	04-10-2001	LaFontaine et al.	
	6,217,549 B1	04-17-2001	Selmon et al.	
	6,224,584 B1	05-01-2001	March et al.	
	6,231,587 B1	05-15-2001	Makower	
	6,238,406 B1	05-29-2001	Ellis et al.	
	6,251,104 B1	06-26-2001	Kesten et al.	
	6,253,769 B1	07-03-2001	LaFontaine et al.	
	6,258,119 B1	07-10-2001	Hussein et al.	
	6,283,951 B1	09-04-2001	Flaherty et al.	
	6,283,983 B1	09-04-2001	Makower et al.	
	6,290,709 B1	09-18-2001	Ellis et al.	
	6,302,875 B1	10-16-2001	Makower et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 9 of 13

Complete if Known

Application Number	10/682,067
Filing Date	October 9, 2003
First Named Inventor	Mark KNUDSON
Art Unit	3738
Examiner Name	ISABELLA, DAVID J.
Attorney Docket Number	07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS

	6,322,548 B1	11-27-2001	Payne et al.	
	6,375,615 B1	04-23-2002	Flaherty et al.	
	6,379,319 B1	04-30-2002	Garibotto et al.	
	6,390,098 B1	05-21-2002	LaFontaine et al.	
	6,423,089 B1	07-23-2002	Gingras et al.	
	6,432,127 B1	08-13-2002	Kim et al.	
	6,443,158 B1	09-03-2002	LaFontaine et al.	
	6,447,539 B1	09-10-2002	Nelson et al.	
	6,454,794 B1	09-24-2002	Knudson et al.	
	6,482,220 B1	11-19-2002	Mueller	
	6,508,825 B1	01-21-2003	Selmon et al.	
	6,524,323 B1	02-25-2003	Nash et al.	
	6,569,147 B1	05-27-2003	Evans et al.	
	6,575,168 B2	06-10-2003	LaFontaine et al.	
	6,579,311 B1	06-17-2003	Makower	
	6,599,304 B1	07-29-2003	Selmon et al.	
	6,616,675 B1	09-09-2003	Evard et al.	
	6,638,247 B1	10-28-2003	Selmon et al.	
	6,638,293 B1	10-28-2003	Makower et al.	
	6,652,546 B1	11-25-2003	Nash et al.	
	6,655,386 B1	12-02-2003	Makower et al.	
	6,660,024 B1	12-09-2003	Flaherty et al.	
	6,669,709 B1	12-30-2003	Cohn et al.	
	6,685,648 B2	02-03-2004	Flaherty et al.	
	6,709,444 B1	03-23-2004	Makower	
	6,726,677 B1	04-27-2004	Flaherty et al.	
	6,746,464 B1	06-08-2004	Makower	
	6,774,278 B1	08-10-2004	Ragheb et al.	
	6,830,568 B1	12-14-2004	Kesten et al.	
	6,929,009 B2	08-15-2005	Makower et al.	
	2001/0018596 A1	08-30-2001	Selmon et al.	
	2001/0047165 A1	11-29-2001	Makower et al.	
	2002/0002349 A1	01-03-2002	Flaherty et al.	
	2002/0029079 A1	03-07-2002	Kim et al.	
	2002/0049486 A1	04-25-2002	Knudson et al.	
	2002/0062146 A1	05-23-2002	Makower et al.	

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	10	of	13	Attorney Docket Number	07883.0080-12

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
		2002/0065478 A1	05-30-2002	Knudson et al.	
		2002/0072699 A1	06-13-2002	Knudson et al.	
		2002/0077654 A1	06-20-2002	Javier, Jr. et al.	
		2002/0092536 A1	07-18-2002	LaFontaine et al.	
		2002/0095206 A1	07-18-2002	Addonizio et al.	
		2002/0123698 A1	09-05-2002	Garibotto et al.	
		2002/0179098 A1	12-05-2002	Makower et al.	
		2003/0018379 A1	01-23-2003	Knudson et al.	
		2003/0149474 A1	08-07-2003	Becker	
		2003/0195457 A1	10-16-2003	LaFontaine et al.	
		2003/0229366 A1	12-11-2003	Reggie et al.	
		2003/0236542 A1	12-25-2003	Makower	
		2004/0019348 A1	01-29-2004	Stevens et al.	
		2004/0059280 A1	03-25-2004	Makower et al.	
		2004/0073157 A1	04-15-2004	Knudson et al.	
		2004/0073238 A1	04-15-2004	Makower	
		2004/0077990 A1	04-22-2004	Knudson et al.	
		2004/0088042 A1	05-06-2004	Kim et al.	
		2004/0122318 A1	06-24-2004	Flaherty et al.	
		2004/0122347 A1	06-24-2004	Knudson et al.	
		2004/0133154 A1	07-08-2004	Flaherty et al.	
		2004/0133225 A1	07-08-2004	Makower	
		2004/0158143 A1	08-12-2004	Flaherty et al.	
		2004/0225355 A1	11-11-2004	Stevens	
		2004/0236418 A1	11-25-2004	Stevens	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ¹⁸
		Country Code ¹⁵ Number ¹⁶ Kind Code ¹⁷ (if known)				
		WO 96/35469 A1	11-14-1996	Cardiogenesis Corporation		Abstract
		WO 96/39962 A1	12-19-1996	Cardiogenesis Corporation		
		WO 96/39964 A1	12-19-1996	Cardiogenesis Corporation		

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/682,067	
			Filing Date	October 9, 2003	
			First Named Inventor	Mark KNUDSON	
			Art Unit	3738	
			Examiner Name	ISABELLA, DAVID J	
Sheet	11	of	13	Attorney Docket Number	07883.0080-12

FOREIGN PATENT DOCUMENTS						
		WO 97/27893 A1	08-07-1997	Transvascular, Inc.		
		WO 97/27898 A1	08-07-1997	Transvascular, Inc.		
		WO 97/32551 A1	09-12-1997	Energy Life Systems Corporation		
		WO 97/43961 A1	11-27-1997	Solem, Jan		
		WO 98/03118 A1	01-29-1998	Solem, Jan		
		WO 98/06356 A1	02-19-1998	Heartstent, LLC		
		WO 98/10714 A1	03-19-1998	Circulation, Inc.		
		WO 98/16161 A1	04-23-1998	Transvascular, Inc.		
		WO 98/24373 A1	06-11-1998	Angiotrax, Inc.		
		WO 98/25533 A1	06-18-1998	Scimed Life Systems, Inc.		
		WO 98/38916 A1	09-11-1998	Cardiogenesis Corporation		
		WO 98/38925 A1	09-11-1998	Scimed Life Systems, Inc.		
		WO 98/38939 A1	09-11-1998	Scimed Life Systems, Inc.		
		WO 98/38941 A1	09-11-1998	Scimed Life Systems, Inc.		
		WO 98/39038 A1	09-11-1998	Scimed Life Systems, Inc.		
		WO 98/46119 A1	10-22-1998	Transvascular, Inc.		
		WO 98/49964 A1	11-12-1998	C.R. Bard, Inc.		
		WO 98/57590 A1	12-23-1998	Scimed Life Systems, Inc.		
		WO 98/57591 A1	12-23-1998	Scimed Life Systems, Inc.		
		WO 98/57592 A1	12-23-1998	Scimed Life Systems, Inc.		
		EP 0 732 088 A2	09-18-1996	Advanced Cardiovascular Systems, Inc.		
		EP 0 792 624 A1	09-03-1997	Eclipse Surgical Technologies, Inc.		
		EP 0 797 957 A1	10-01-1997	Eclipse Surgical Technologies, Inc.		
		EP 0 797 958 A1	10-01-1997	Eclipse Surgical Technologies, Inc.		
		EP 0 799 604 A1	10-08-1997	Eclipse Surgical Technologies, Inc.		
		EP 0 801 928 A1	10-22-1997	Eclipse Surgical Technologies, Inc.		
		EP 0 815 798 A2	01-07-1998	Eclipse Surgical		

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	12	of	13	Attorney Docket Number	07883.0080-12

FOREIGN PATENT DOCUMENTS						
				Technologies, Inc.		
		EP 0 829 239 A1	03-18-1998	Eclipse Surgical Technologies, Inc.		
		EP 0 853 921 A2	07-22-1998	Eclipse Surgical Technologies, Inc.		
		EP 0 858 779 A1	08-19-1998	Eclipse Surgical Technologies, Inc.		
		EP 0 876 796 A2	11-11-1998	Eclipse Surgical Technologies, Inc.		
		EP 0 876 803 A2	11-11-1998	C.R. Bard, Inc.		
		EP 0 959 815 A1	12-11-2002	Heartstent Corporation		
		EP 1 166 721 A2	01-02-2002	Transvascular, Inc.		
		GB 2 316 322 B	10-14-1998	Heartstent Corporation		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		Translation ⁶
		ANNE BOHNING, KENNETH JOCHIM & LOUIS N. KATZ; "The Thebesian Vessels as a Source of Nourishment for the Myocardium"; American Journal of Physiology; 1933; pp. 183-200; Vol. 106; American Physiological Society; U.S.A.		
		AKIO WAKAYABASHI, SOLOMON T. LITTLE, JR. & JOHN E. CONNOLLY; "Myocardial Boring for the Ischemic Heart"; Archives of Surgery; Nov. 1967; pp. 743-752; Vol. 95; American Medical Association; U.S.A.		
		ISAM N. ANABTAWI, HUBERT F. REIGLER, & ROBERT G. ELLISON; "Experimental evaluation of myocardial tunnelization as a method of myocardial revascularization"; Journal of Thoracic and Cardiovascular Surgery; Nov. 1969; pp. 638-646; Vol. 58, No. 5; The C.V. Mosby Company; St. Louis, MO.		
		JOSEPH P. ARCHIE JR.; "Intramyocardial Pressure: Effect of Preload on Transmural Distribution of Systolic Coronary Blood Flow"; The American Journal of Cardiology; Jun. 1975; pp. 904-911; Vol. 35; U.S.A.		
		S. SULTAN AHMED, BUNYAD HAIDER & TIMOTHY J. REGAN; "Silent left coronary artery-cameral fistula: probable cause of myocardial ischemia"; American Heart Journal; Oct. 1982; pp. 869-870; Vol. 104, No. 4, pt. 1; The C.V. Mosby Company; St. Louis, MO.		
		GARRETT LEE, RICHARD M. IKEDA, JEROLD THEIS, DANIEL STOBBE, CLAIRE OGATA, HENRY LUI, ROBERT L. REIS, & DEAN T. MASON; "Effects of laser irradiation delivered by flexible fiberoptic system on the left ventricular internal myocardium"; American Heart Journal; Sept. 1983; pp. 587-590; Vol. 106, No. 3; The C.V. Mosby Company; St. Louis, MO.		
		HOWARD A. COHEN & MARCO ZENATI; "Alternative Approaches to Coronary Revascularization"; Current International Cardiology Reports; 1999; pp. 138-146; Vol. 1; Current Science, Inc.; U.S.A.		
		Burch, et al., An International Publication for the Study of the Circulation, American Heart Journal, (Jan. 1980), pp. 8-9.		
		Angell et al., Organ viability with hypothermia, The Journal of Thoracic and Cardiovascular Surgery, Vol. 58, No. 5 (Nov. 1969), pp. 619-646.		
		Lary et al., A method for creating a coronary-myocardial artery; Surgery, Vol. 59 (June 1966) pp. 1061-10640		

IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/682,067
				Filing Date	October 9, 2003
				First Named Inventor	Mark KNUDSON
				Art Unit	3738
				Examiner Name	ISABELLA, DAVID J
Sheet	13	of	13	Attorney Docket Number	07883.0080-12

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ²²
		Country Code ¹⁹ Number ²⁰ Kind Code ²¹ (if known)				
		EP 0 592 410 B1	10-11-1995	Anderson, Henning Rud		
		EP 0 954 248 B1	09-15-2004	Transvascular, Inc.		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.